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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/572,803

03/22/2006

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EXAMINER

YENKE, BRIAN P

ART UNIT

PAPER NUMBER

2622

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/572,803	Applicant(s) NISHI ET AL.	
	Examiner BRIAN P. YENKE	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Election (02/18/09).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-21 and 24-44 is/are rejected.
- 7) ☒ Claim(s) 8, 9, 22 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election with traverse of claims 1-44 in the reply filed on 02/18/09 is acknowledged. The traversal is on the ground(s) that "principles of unity of invention" not "restriction practice" is used to determine claimed subject matter in a single or national stage patent application. The examiner agrees that principles of unit of invention apply to a national stage application, however the current application is the US Stage, thus restriction practice applies. Nonetheless, the examiner has withdrawn the restriction requirement in view of the claims being obvious variants over each other. In the event the applicant disagrees, the examiner suggests cancelling claims which are patentably distinct.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims (see below) are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 15-30, and 37-44 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing ("[t]he Supreme Court has recognized only two instances in which such a method may qualify as a section 101 process: when the process 'either [1] was tied to a particular apparatus or [2] operated to change materials to a 'different state or thing.''" See PTO

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Supp. Br. 4 (quoting Flook, 437 U.S. at 588 n.9). In Diehr, the Supreme Court confirmed that a process claim reciting an algorithm could state statutory subject matter if it: (1) is tied to a machine or (2) creates or involves a composition of matter or manufacture. 1_.2 450 U.S. at 184." *In re Comiskey*, 84 USPQ2d 1670 (Fed. Cir. 2007). The instant claims neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. In order for a process to be "tied" to another statutory category, the structure of another statutory category should be positively recited in a step or steps significant to the basic inventive concept, and NOT just in association with statements of intended use or purpose, insignificant pre or post solution activity, or implicitly.

As described in the disclosure (para 0229), the operations of the inventions can be implemented as software ... thus being non-statutory subject matter.

It is noted that the method claims as annotated above, may be practiced by software (as disclosed), wherein the examiner notes no corresponding hardware/processor/circuitry is recited in the claims. Although claim 15 recites an apparatus in the preamble, no functional relationship between the method and hardware/circuitry are required in the claim, since the method is performed after the picture is taken, which is the only apparatus portion recited.

The examiner suggests clarifying in the claim that such steps are carried out by hardware and/or deleting such reference in the disclosure to software/ in order to overcome the rejection. Alternatively, if the applicant feels that the claims as currently recited does not necessitate a 101 rejection, the applicant should argue such.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 13, 15-19, 27, 29-31, 35, 37, 41 and 43-44 are rejected under 35 U.S.C. 102(e) as being anticipated by De Haan et al., US 7,489,350.

In considering claims 1, 15, 29-31, 37 and 43-44,

a) the claimed a high rate conversion...is met by is met by motion picture rate conversion unit 106 (Fig 1a/b).

b) the claimed detection means...is met by film-detector 108 which detects whether an image frame was film shot or video shot, wherein film originated images are more blurred to suppress judder (col 2, lined 7-9).

c) the claimed correction means...is met by sharpness enhancement 104 (Fig 1a/b) and motion estimation 110 which receive the motion information and reduce the blur of individual images caused by long shutter times (col 3, line 18-58), wherein the correction is based upon the image blur caused by long shutter times associated with a camera (film shot) image, where the value is based upon the extent of motion.

In considering claims 2-5 and 16-19,

As stated above with respect to claim 1, De Haan discloses picture rate conversion unit 106 (col 6, line 3-24) based upon the parameters of the film mode/motion detection circuits. The first rate is the rate at which the image was shot either at 24 or 25 Hz., including film (photographed). The motion vectors are detected via motion detection 110 which may be verified/validated via collision detector 116 (Fig 1b).

In considering claims 13, 27 and 35, 41

Refer to claim 1 above.

Claim Rejections - 35 USC § 103

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3a. Claims 11-12, 14, 24-26, 28, 32-34, 36, 38-40 and 42 are rejected under 35 U.S.C.103(a) as being obvious over De Haan et al., US 7,489,350.

In considering the above claims,

DeHann discloses that various inputs may be received, including 24, 25, 30 and 50 Hz and converting such signals into desired output signals, i.e. more than 50, including 100Hz, but does not explicitly recite the frequencies as claimed (i.e. first rate 60, output of 120, or 200 or 240), however the features of varying rates on the input and output are commonplace based upon types of signals/systems and user(s) needs/desires thus the examiner maintains the use of a particular frequency is obvious if supported by a particular system/device, since there are no unexpected results derived by using a particular frequency.

3b. Claims 6 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Haan et al., US 7,489,350 in view of Kitagawa et al., US 5,737,643.

In considering claim 6,

DeHaan does not explicitly recite "shutter speed" as recited. Although DeHaan does disclose the use of shutter blue in compensation for motion. Although the concept of shutter speed plays a role in detecting/ascertaining/correcting the amount of motion, the examiner will evidence such by incorporating US 5,737,643 which discloses motion compensation using shutter speed. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the conventional features of shutter speed and image blurring in motion compensation in order to provide DeHann the ability to accurately compensate for the detected film image (which are photographed).

3c. Claims 7 and 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Haan et al., US 7,489,350 in view of Kai et al., US 5,752,091.

DeHaan does not explicitly recite the features of filtering (i.e. LPF) an then performing an inverse filter on the first filter as claimed.

The examiner evidences the concept of performing a first filtering operation (in this instance a HPF) and then performing an inverse (LPF) on the HPF signal by relying upon Kai et al., US 5,752,091 (Fig 8), HPF 131 and LPF 141, which is used to correct for the camera motion.

Thus it would have been obvious to modify DeHaan which discloses the problems/encounters while capturing images using a camera/photographer and thus would have been motivated to correct for such encounters by known methods.

It is noted the claim calls for LPF then HPF, wherein Kai discloses HPF then LPF, it is noted the concept of performing either operation derives expected results and is thus considered an obvious modification in order to isolate a frequency area of a received signal.

Allowable Subject Matter

4. Claims 8-9 and 22-23 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure—see newly cited references on attached form PTO-892.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (571)272-7359. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, David L. Ometz, can be reached at (571)272-7593.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571)-273-8300

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703)305-HELP.

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PAIR (<http://pair.uspto.gov>) provides customers direct secure access to their own patent application status information, as well as to general patent information publicly available. EFS allows customers to electronically file patent application documents securely via the Internet. EFS is a system for submitting new utility patent applications and pre-grant publication submissions in electronic publication-ready form. EFS includes software to help customers prepare submissions in extensible Markup Language (XML) format and to assemble the various parts of the application as an electronic submission package. EFS also allows the submission of Computer Readable Format (CRF) sequence listings for pending biotechnology patent applications, which were filed in paper form.

/BRIAN P. YENKE/
Primary Examiner, Art Unit 2622

B.P.Y
08 April 2009

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